

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Previously Presented) A method of implanting a pressure measurement device in a heart of a patient, comprising the steps of

providing a pressure sensor assembly comprising a pressure transducer and a pressure transmission catheter, the catheter having a distal portion and a proximal portion, the pressure transducer connected to the proximal portion of the catheter, the distal portion of the catheter having an opening with a barrier, wherein the proximal portion is more crush resistant than the distal portion and wherein the distal portion is more flexible than the proximal portion; and

positioning the catheter so that the relatively crush resistant proximal portion is disposed in a heart wall and the relatively flexible distal portion extends into a chamber of the heart.

2. (Previously Presented) A method of implanting a pressure measurement device in a heart of a patient as in claim 1, further comprising the steps of:

providing an implantable telemetry unit;

connecting the telemetry unit to the pressure sensor assembly; and

implanting the telemetry unit in the patient.

3. (Previously Presented) A method of implanting a pressure measurement device in a heart of a patient as in claim 1, wherein the heart wall includes an epicardial layer, a myocardial layer and an endocardial layer, and wherein the positioning step comprises positioning the catheter across the epicardial layer, myocardial layer and endocardial layer.

4. (Original) A method of implanting a pressure measurement device in a heart of a patient as in claim 1, wherein the chamber comprises a left ventricle, and wherein the positioning

step comprises positioning the catheter across the heart wall with the opening disposed in the left ventricle.

5. (Original) A method of implanting a pressure measurement device in a heart of a patient as in claim 1, wherein the chamber comprises a right ventricle, and wherein the positioning step comprises positioning the catheter across the heart wall with the opening disposed in the right ventricle.

6. (Previously Presented) A method of implanting a pressure measurement device in a heart of a patient as in claim 1, wherein the heart wall comprises a septum, and wherein the positioning step comprises positioning the catheter across the septum.

7. (Previously Presented) A method of implanting a pressure measurement device in a heart of a patient as in claim 1, wherein the pressure sensor assembly includes a housing containing the pressure transducer, further comprising the step of securing the housing to the heart wall.

8. (Original) A method of implanting a pressure measurement device in a heart of a patient as in claim 7, wherein the securing step comprises securing the housing outside the heart.

9. (Original) A method of implanting a pressure measurement device in a heart of a patient as in claim 7, wherein the securing step comprises securing the housing inside the heart.

10. (Original) A method of implanting a pressure measurement device in a heart of a patient as in claim 1, wherein the positioning step comprises a surgical approach.

11. (Original) A method of implanting a pressure measurement device in a heart of a patient as in claim 1, wherein the positioning step comprises a transluminal approach.

12. (Previously Presented) A method of implanting a pressure measurement device in a heart of a patient as in claim 1, wherein the pressure transducer is provided in a housing which is disposed outside the chamber of the heart on an opposite side of the heart wall.

13. (Previously Presented) A method of implanting a device, comprising the steps of:
providing an implantable device comprising a telemetry unit connected to a pressure sensor assembly connected to a catheter, the catheter having a distal portion and a proximal portion, the pressure sensor assembly connected to the proximal portion of the catheter, wherein the proximal portion is more crush resistant than the distal portion and wherein the distal portion is more flexible than the proximal portion; and

implanting the device such that the relatively crush resistant proximal portion is disposed in a heart wall and the relatively flexible distal portion extends into a chamber of the heart, the pressure sensor assembly connected to the heart wall outside the chamber.

14. (Original) A method of implanting a device as in claim 13, wherein the heart wall includes myocardium, and wherein the positioning step comprises positioning the catheter across the entire myocardium.

15. (Original) A method of implanting a device as in claim 13, wherein the chamber comprises a left ventricle, and wherein the positioning step comprises positioning the catheter across the heart wall with the opening disposed in the left ventricle.

16. (Original) A method of implanting a device as in claim 13, wherein the chamber comprises a right ventricle, and wherein the positioning step comprises positioning the catheter across the heart wall with the opening disposed in the right ventricle.

17. (Original) A method of implanting a device as in claim 13, wherein the heart wall comprises a ventricular septum, and wherein the positioning step comprises positioning the catheter across the ventricular septum.

18-43. (Canceled)

44. (Previously Presented) A method of implanting a pressure measurement device in a heart of a patient as in claim 8, wherein the housing has a tissue in-growth promoting surface and a tissue in-growth deterring surface, and wherein the securing step comprises securing the tissue in-growth promoting surface to an epicardial surface of the heart with the tissue in-growth deterring surface facing a pericardial surface of the heart.

45-47. (Canceled)

48. (Previously Presented) A method of implanting a device as in claim 13, wherein the heart wall comprises a ventricular septum, and wherein the positioning step comprises transvenously navigating the pressure sensor assembly until the catheter is disposed adjacent the ventricular septum, and positioning the catheter across the ventricular septum.

49. (Previously Presented) A method of implanting a device as in claim 48, wherein the positioning step comprises placing a septal anchor across the ventricular septum with the catheter disposed in the septal anchor.

50. (Previously Presented) A method of implanting a pressure measurement device in a heart of a patient as in claim 1, wherein the barrier is flush with a distal end of the catheter, and wherein the positioning step comprises positioning the barrier carried by the distal end of the catheter in the chamber.

51. (Previously Presented) A method of implanting a pressure measurement device in a heart of a patient as in claim 1, wherein the barrier is recessed from a distal end of the catheter, and wherein the positioning step comprises positioning the barrier carried by the distal end of the catheter in the chamber.

52. (Previously Presented) A method of implanting a pressure measurement device in a heart of a patient as in claim 51, wherein a dissolvable material is disposed in the distal end of the catheter, and wherein the positioning step comprises positioning the dissolvable material carried by the distal end of the catheter in the chamber.

53-54. (Canceled)

55. (Previously Presented) A method of implanting a pressure measurement device in a heart of a patient as in claim 3, wherein an introducer sheath is initially disposed about the catheter, and wherein the positioning step comprises positioning the introducer sheath and catheter across the myocardium.

56-59. (Canceled)

60. (Previously Presented) A method of implanting a pressure measurement device in a heart of a patient as in claim 11, further comprising the steps of:

providing a catheter; navigating the catheter through the patient's vascular system and into the patient's heart; and

wherein the positioning step comprises advancing the pressure sensor assembly through the catheter.

61. (Previously Presented) A method of implanting a pressure measurement device in a heart of a patient as in claim 60, wherein the navigating step comprises positioning a distal end of the catheter adjacent a septal wall in the patient's heart.

62. (Previously Presented) A method of implanting a pressure measurement device in a heart of a patient as in claim 61, wherein the distal end of the catheter includes an anchor, further comprising the step of engaging the anchor to the septal wall.

63. (Previously Presented) A method of implanting a pressure measurement device in a heart of a patient as in claim 1, wherein the barrier is compliant.

64. (Previously Presented) A method of implanting a pressure measurement device in a heart of a patient as in claim 1, wherein the barrier comprises a gel.

65. (Previously Presented) A method of implanting a pressure measurement device in a heart of a patient as in claim 1, wherein the barrier comprises a membrane.

66. (Previously Presented) A method of implanting a pressure measurement device in a heart of a patient as in claim 1, wherein the pressure transducer comprises a piezoresistive type transducer.

67. (Previously Presented) A method of implanting a pressure measurement device in a heart of a patient, comprising the steps of:

providing a pressure sensor assembly comprising a pressure transducer and a pressure transmission member defining a cavity having a distal portion and a proximal portion, the pressure transducer connected to the proximal portion of the pressure transmission member the distal portion of the pressure transmission member having an opening with a barrier, wherein the proximal portion is more crush resistant than the distal portion and wherein the distal portion is more flexible than the proximal portion;

positioning the pressure transmission member so that the relatively crush resistant proximal portion is disposed in a heart wall and the relatively flexible distal portion extends into a chamber of the heart.

68. (Previously Presented) A method of implanting a pressure measurement device in a heart of a patient as in claim 67, wherein the pressure transmission member comprises a tube.

69. (Previously Presented) The method of claim 13, wherein the pressure sensory assembly includes a housing which is disposed outside the chamber of the heart on an opposite side of the heart wall.

70. (Previously Presented) The method of claim 67, wherein the pressure transducer is provided in a housing which is disposed outside the chamber of the heart on an opposite side of the heart wall.